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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/026,729	12/27/2001	Gabriele Perego	08719.0195	1975
7590	10/10/2003		EXAMINER	
Finnegan, Henderson, Farabow, Garrett & Dunner, L.L.P. 1300 I Street, N.W. Washington, DC 20005-3315			GRAY, JILL M	
			ART UNIT	PAPER NUMBER
			1774	

DATE MAILED: 10/10/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/026,729

Applicant(s)

PEREGO ET AL.

Examiner

Jill M. Gray

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 15 July 2003.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 24-42 and 45-57 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 24-42 and 45-57 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____.
- 4) ☐ Interview Summary (PTO-413) Paper No(s). _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

DETAILED ACTION

Response to Amendment

The objection of claims 43 and 53 is withdrawn in view of applicants' amendments.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 24-27, 30-42 and 45-57 are rejected under 35 U.S.C. 102(b) as being anticipated by Japanese Patent Publication H10-283851, for reasons of record.

Nomura teaches an electric cable, composition and process for making said cable. The insulating polymeric composition is essentially as claimed by applicants and comprises a polyethylene grafted with at least one unsaturated carboxylic acid of the general formula set forth by applicants in claims 24, 38, 47 and 56, further teaching that this carboxylic acid can be acrylic acid as required by claims 25, 31-37, 45-46 and 54-55. See page 5, lines 25-28 and page 6, lines 4-5. In addition, Nomura teaches a radical initiator of the same type contemplated by applicants in claims 34-35 and 52-53 and that said initiator could be present within applicants' range as set forth in claims 26-27. As to the specific polyethylene, Nomura teaches that the polyethylene can be an ethylene homopolymer or copolymer, wherein the copolymer can be an α -olefin such as propylene and the homopolymer can be a low density polyethylene and have a density

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of 0.920 g/cm³, as required by claims 30-33, 39-42, and 48-51. See page 5, lines 22-27 and page 8, lines 21-24. As to the process step in claim 24 of coating by extrusion, Nomura teaches extruding. See page 7, lines 25-29. Regarding claims 56-57, these claims are product by process claims wherein patentability is based solely on the product.

Therefore the prior art teachings of Nomura anticipate the invention as claimed in claims 24-27, 30-42 and 45-57.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 28-29 are rejected under 35 U.S.C. 103(a) as being unpatentable over Japanese Patent Publication H10-283851 (Nomura) for reasons of record.

Nomura is as set forth above but does not specifically teach the grafting method. It would have been obvious to produce a grafted polyethylene polymer wherein polyethylene pellets and carboxylic acid are subsequently mixed in an extruder because the heat of extrusion would have been sufficient to cause reaction of the carboxylic acid and polyethylene resulting in the carboxylic acid being grafted onto the polyethylene backbone.

Response to Arguments

Applicant's arguments filed July 15, 2003 have been fully considered but they are not persuasive.

Applicants argue that the cross-linked polymeric composition of the present claims is a species of the cross-linked copolymer disclosed in Nomura and that the disclosure of a genus does not anticipate a claimed species.

In this regard, Nomura discloses the same cross-linked polymeric compositions contemplated by applicants, namely, that his polyolefin can be an ethylene homopolymer or copolymer of ethylene with at least one α -olefin, wherein said ethylene homopolymer can be low density polyethylene and said α -olefin can be propylene, as required by applicants' claims 30-33, 39-42, and 48-51. See page 5, lines 20-26. Clearly Nomura teaches the same polymers contemplated by applicants, which cannot be construed to be a "genus-species" relationship. Thus, it is the examiner's position that when the prior art teaches that which applicants' regard as their invention, said prior art anticipates the invention as claimed.

Applicants argue that Nomura discloses a specific radical initiator, 2,5-dimethyl-2,5-di(t-butylperoxyhexane) and teaches away from the instant invention, citing Nomura's disclosure at page 4, lines 17-29, as it relates to DCP.

Agreeably Nomura teaches the specific radical initiator noted by applicants. However, it is noted that applicant's claims 35 and 53 claim 2,5-dimethyl-2,5-di(t-butylperoxyhexane) as a suitable radical initiator and are not limited to DCP. Teaching the exact subject matter as that defined by the invention cannot be construed as teaching away from said invention. Rather, a teaching of the invention as claimed.

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Hence, the skilled artisan would immediately envisage the incorporation of a radical initiator of the type contemplated by applicants.

Applicants argue that Nomura extrudes and crosslinks an already modified ethylene based copolymer and fails to disclose modifying a polyethylene homopolymer during an extrusion and crosslinking step by adding carboxylic acid in the form of granules as recited in claim 28 or mixing with the polyethylene directly in an extruder cylinder as recited in claim 29.

In this regard, it is the examiner's position that the language of claims 28 and 29 does not exclude reactions between the polyethylene and carboxylic acid prior to extruding. Regarding the heat of extrusion, it would have been well within the normal purview of the art to determine the processing conditions commensurate with the desired end product, namely, the production of a crosslinked electrical cable insulated with a polymeric composition comprising a polyethylene, a radical initiator and at least one carboxylic acid. Also, it should be noted that applicants' claims are nonspecific as to any particular processing conditions.

Therefore, the examiner's position remains that the prior art teachings of Nomura would have anticipated the invention as claimed in claims 24-27, 30-42, and 45-57 and rendered obvious the invention as claimed in claims 28-29.

No claims are allowed.

Conclusion

THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

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A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jill M. Gray whose telephone number is 703.308.2381. The examiner can normally be reached on M-F 10:30-7:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Cynthia Kelly can be reached on 703.308.0449. The fax phone number for the organization where this application or proceeding is assigned is (703) 872-9306.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703.308.0651.

Jill M. Gray
Examiner
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CYNTHIA H. KELLY
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 1700

